

REMARKS

The present application is a continuation of United States Patent Application Ser. No. 09/870,287 filed on May 30, 2001 ("the Parent Application"), now US Patent No. 6,720,765.

In present document, the specifications have been amended to provide the patent number of the parent application.

In the present document, apparatus claims 1, 8 and 12 have been amended to replace intended use language with operative language. Dependent claim 6 has been canceled.

Apparatus claims 15, 18, 21 have been amended to replace intended use language with operative language.

Independent claim 15 has been amended to include the substantive limitations of claim 17. Claim 17 has been canceled.

Claim 21 has been canceled.

Independent claim 42 has been amended to include the substantive limitations of claim 45.

Claim 45 has been canceled.

New independent claim 55 includes the substantive limitations of claims 15 and 18.

New independent claim 56 includes the substantive limitations of claims 42 and 46.

No new matter has been added by the amendments. Reconsideration of the application as amended is respectfully requested. The Examiner's objections and rejections are addressed in substantially the same order as in the referenced office action.

DOUBLE PATENTING

Claims 1-9, 11-49 and 52-54 stand rejected under the judicially created doctrine of obviousness type double patenting over the claims of US 6,720,765. A Terminal Disclaimer is being filed concurrently with this document.

REJECTION UNDER 35 USC § 102

Claims 15 and 42 stand rejected under 35 USC § 102 over US 4408161 to *Brown*.

Claims 15 and 42 are independent claims.

Claim 15 has been amended to include the use of at least two spaced apart receiver coils. As noted in paragraph [0013] of the application, when two or more receiver coils are used in a single sensor assembly, improved resolution is obtained using the phase of the received signals.

A careful reading of *Brown* shows no teaching or suggestion of the use of two or more receiver coils. Accordingly, applicant respectfully submits that claim 15 and claims 16 and 18 -21 that depend upon claim 15 are patentable under 35 USC §§ 102-103 over *Brown* and the prior art of record.

Claim 42 as amended includes the substantive limitations of claim 15 discussed above. Accordingly, applicant submits that claim 42 and claims 43-44, 46-49 that depend upon claim 42 are patentable under 35 USC §§102-103 over *Brown* and the prior art of record for the same reasons that claim 15 is patentable under 35 USC §§ 102-103 over *Brown* and the prior art of record.

New claim 55 includes the limitations of original claims 15 and the use of a field shifting magnet. The use of a field shifting magnet is not taught or suggested in *Brown*.

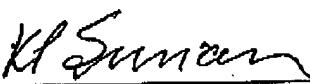
Accordingly, applicant respectfully submits that claim 55 is patentable under 35 USC §§ 102-103 over *Brown* and the prior art of record.

New claim 56 includes the limitations of original claims 15 and the use of a field shifting magnet. The use of a field shifting magnet is not taught or suggested in *Brown*. Accordingly, applicant respectfully submits that claim 55 is patentable under 35 USC §§ 102-103 over *Brown* and the prior art of record.

The Commissioner is hereby authorized to charge any deficiency and credit any surplus to Deposit Account 02-0429 (584-25428USC)

Respectfully submitted

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